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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/582,634	09/13/2000	Shirwan Alpasha Al Bahdaini		5682

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EXAMINER

TRIEU, THAI BA

ART UNIT	PAPER NUMBER
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3748

DATE MAILED: 01/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/582,634

Applicant(s)

AL BAHDAINI, SHIRWAN
ALPASHA

Examiner

Thai-Ba Trieu

Art Unit

3748

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 April 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) 4-32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other:

DETAILED ACTION

This Office Action is in response to the argument letter filed April 12, 2002.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "28" has been used to designate both "hole inlets" (See Page 12, lines 2-4) and "ignition distributor" (See page 14, line 8-13).

Correction is required.

Specification

IN THE ABSTRACT:

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range **of 50 to 250 words**. It is important that ***the abstract not exceed 250 words in length since the space provided for the abstract on the computer tape used by the printer is limited.*** The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The following guidelines illustrate the preferred layout and content for patent applications. These guidelines are suggested for the applicant's use.

The substitute specification and claims filed May 07, 2001 have not been entered because it does not conform to 37 CFR 1.125(b) because: a marked up copy of the substitute has not been supplied (in addition to the clean copy) ***(See the attached example for the marked up copy. Noted that the marked-up copy should be made on the original copy filed on 09/13/2000).***

IN THE SPECIFICATION:

The amendment filed on April 12, 2002 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material in the Amendment, which is not supported by the original disclosure is as follows: ***Page 7, lines 23-24, Page 20, line14, Pages 21-24, lines 1-33, and Page 5, lines 1-2.***

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Objections

Claim 1 is objected to because of the following informalities:

- line 28, "where" should be replaced by -- wherein--;
- lines 23 and 29, "its" renders the claim indefinite.;
- line 30, "devises" should be replaced by -- devices --.

Appropriate correction is required.

Claims **4-32** are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternatively only, and/or cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims **4-32** have not been further treated on the merits.

A series of singular dependent claims is permissible in which a dependent claim refers to a preceding claim which, in turn, refers to another preceding claim.

An examination of this application reveals that applicant is unfamiliar with patent prosecuting procedure. While an inventor may prosecute the application, lack of skill in this field usually acts as a liability in affording the maximum protection for the invention disclosed. Applicant is advised to secure the services of a registered patent attorney or agent to prosecute the application, since the value of a patent is largely dependent upon skillful preparation and prosecution. The Office cannot aid in selecting an attorney or agent.

Applicant is advised of the availability of the publication "Attorneys and Agents Registered to Practice Before the U.S. Patent and Trademark Office." This publication is for sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

If applicant continues to prosecute the application, revision of the specification and claims to present the application in proper form is required. While an application

can be amended to make it clearly understandable, no subject matter can be added that was not disclosed in the application as originally filed.

A claim which depends from a dependent claim should not be separated by any claim which does not also depend from said dependent claim. It should be kept in mind that a dependent claim may refer to any preceding independent claim. In general, applicant's sequence will not be changed. See MPEP § 608.01(n).

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of 37 CFR 1.71(a)-(c):

(a) The specification must include a written description of the invention or discovery and of the manner and process of making and using the same, and is required to be in such full, clear, concise, and exact terms as to enable any person skilled in the art or science to which the invention or discovery appertains, or with which it is most nearly connected, to make and use the same.

(b) The specification must set forth the precise invention for which a patent is solicited, in such manner as to distinguish it from other inventions and from what is old. It must describe completely a specific embodiment of the process, machine, manufacture, composition of matter or improvement invented, and must explain the mode of operation or principle whenever applicable. The best mode contemplated by the inventor of carrying out his invention must be set forth.

(c) In the case of an improvement, the specification must particularly point out the part or parts of the process, machine, manufacture, or composition of matter

to which the improvement relates, and the description should be confined to the specific improvement and to such parts as necessarily cooperate with it or as may be necessary to a complete understanding or description of it.

The specification is objected to under 37 CFR 1.71 because of failing to provide an adequate written description of the invention.

Claims 1-3 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Specifically,

- In claim 1, line 15, ***"While theses gases expelled via a specific aerodynamic opening mounted in the case"*** is an incomplete sentence and lacks meaning; and lacks a proper explanation thereof in the specification. What is meant by the specific aerodynamic opening?

- In claim 2, lines 1-5, ***"using combination of piston principle, rotary principle and a turbine principle in additional to utilizing physical affections due to the specific movement of the engine parts in performance to act all positively to add extra powers of these energies on engine output torque i.e. magnifying the power of the said fuel"*** lacks a proper explanation thereof in the specification.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-3 are rejected as failing to define the invention in the manner required by 35 U.S.C. 112, second paragraph.

The claim(s) are narrative in form and replete with indefinite and functional or operational language. The structure which goes to make up the device must be clearly and positively specified. The structure must be organized and correlated in such a manner as to present a complete operative device. The claim(s) must be in one sentence form only. Note the format of the claims in the patent(s) cited.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-3 are rejected under 35 U.S.C. 101 because the invention as disclosed is inoperative and therefore lacks utility. Applicant's invention belongs to a class of devices known as "closed pocket turbines" which are categorically inoperative. The definition of class 60, subclass 39.44 ("Closed Pocket Turbines") states that motive fluid introduced into these closed pockets is trapped therein, and while so trapped, is incapable of exerting any useful energy release by expansion, impulse or reaction. Engines of this type are considered to be inoperative to produce useful power.

The effective area of each pocket on which the pressure can act is the area of the leading and trailing pocket faces projected on a radial plane. This projected area is the same for both faces. The tendency to rotate is equal and opposite, and therefore

there will be no rotation in the desired direction. The direction of the resultant force of the pressure in each pocket is radial, through the axis of the rotor, and therefore there is no tangential component of force. The existence of such a tangential force balance is completely independent of the shape of the rotor pocket.

In order to obtain useful power from the gases generated, said gases must be allowed to expand against a movable wall and exert forces of expansion by static pressure in a confined expansible space such as between a cylinder and a piston, or a high velocity jet of gas must be provided which is free to impact against vanes and immediately escape. In applicant's device there is no expansion of the gases because the volume of each pocket remains constant as the rotor rotates, also the high velocity jet of gas is not free to impact against vanes and immediately escape.

Since the intended mode of operation of applicant's device appears to conflict with well known and accepted principles, the presumption of inoperativeness is so strong that very clear evidence is required to overcome it. Therefore, applicant is required to submit a working model and/or affidavits from qualified, unbiased and disinterested persons who are familiar with the general principles involved in the operation of the device, attesting to its operativeness. A qualified person is one having an advanced degree in physics or mechanical engineering from a leading university such as Stanford, or the California Institute of Technology, or Massachusetts Institute of Technology, and an understanding of the combustion processes in internal combustion engines.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Hay (Patent Number GB 349614).

Regarding claim 1, Hay discloses an engine comprising
from a cylindrical case having at least a wheel(s) (i.e. flywheel) mounted coaxially on a straight (crank)shaft (D) inside the cylindrical case (G) for rotation therein (See Figures 1, 2, and 4);

the said wheel(s) containing at least one cylinder in centre-side perpendicular to the axis, in which it is opened from one side to the inside circumferential surface of the case cavity (See Figures 1, 2, and 4);

a piston (R) mounted inside the cylinder which has the ability of linear movement therein (See Figures 1, 2, and 4);

the piston top (Y) together with the cylinder wall (bore) (X) and inner circumferential surface of the case, defining a combustion chamber (See Figures 1, 2, and 4);

the piston (R) being mounted to the closed end of the cylinder via a flexible free elastic push-arm(See Figures 1, 2, and 4);

seals (Read as a film of lubricating medium) mounted with the case meaning around the circumference of the wheel along the edge at each side, as well as at three or more radial locations guarded the mode of stroke situation zone during the work of the engine (See Page 1, lines 9-27);

the wheel supplied with fuel mixture inlet(s), spark plug(s) (a), exhaust pipe(s) and air supply inlet(s)(N, M, L) mounted in the case (See Figure 2);

in the end of exhaust stroke, there is a valve feeding air in the right time on the chamber to scavenging and cleaning hot exhaust gases to cool the chamber while these gases expelled via a specific aerodynamic opening mounted in the case;

the pre-compressed air-fuel mixture charged (fed) into the chamber(s) from outside by, inlet valve away from firing stroke zone, using required accessories (pressured gas cylinder, pipes and fuel spraying device all controlled by mechanical or computer system) (See Page 1, lines 102-107, Pages 2-3, lines 1-130, and Page 4, lines 1-44).

the lubrication and cooling services working depending on the centrifugal principal by discharging oil from the main central canal inside the shaft length to engine parts via holes then to outsider case (r) ; the oil servicing for piston wall using a rod pump mounted in its push-arm connecting piston with oil intake, working related to its linear movement, sucking oil from the central oil canal; then ended to wheel side-wall ; and the wheel has oil cooling pad in each side, fed from central oil canal collecting oil

from piston(s) then to direct oil by radial grooves to the outsider case(See Figures 2); and oil cooled in the case while directed to the oil tank in an engine end, which connected again to the central canal; wherein more than one wheel inside the case each wheel could work separately with its independent fuel and air feeding accessories by controlling devices from out side (See the entire document).

Regarding claims 2 and 3, Hay further discloses the said engine is using combination of piston principle, rotary principle and a turbine principle in additional to utilizing physical affections due to the specific movement of the engine parts in performance to act all positively to add extra powers of these energies on engine output torque i.e. magnifying the power of the said fuel (See Page 1, lines 9-51, Page 4, lines 104-112; and Page 5, lines 1-27); and the said engine is using the principle of injecting pre-compressed air-fuel mixture as used in the Jet system but it is vertically on the axis of a specific wheel(s) contains piston(s) of free elastic push-arm, to work similar as a turbine; by utilizing all reaction powers of fuel-mix combustion in its chamber(s) for output (See Figures 1, 2, and 4);

the engine has the good characteristics of piston system as easily controlled with fuel economic and the turbine Jet system of speedy powerful output; and

the said engine would stand as the bridge on that wide gap between piston system and turbine jet system (See Page 8, lines 93-97).

Claim 1 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Coignard Yvette (Patent Number FR 2,252,764).

See the entire document.

Claim 1 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Boeuf Paul (Patent Number FR 2,229,274).

See the entire document.

Response to Arguments

Applicant's arguments filed April 12, 2002 have been fully considered but they are not persuasive. Claims 1-32 are pending.

1. Applicant should submit an argument under the heading "Remarks" pointing out disagreements with the examiner's contentions. Applicant must also discuss the references applied against the claims, explaining how the claims avoid the references or distinguish from them.

2. With regard to applicant's arguments on Page 2, lines 16-30, that in the instant application, ***"the claim is determining the overall parts of the engine and how subjecting the design to employ certain physical concepts to be conducted in a perfect way with improving advanced characteristics. However, it would be normal... on design spirit of the engine, which is surely a healthy sign indeed to discover scientific truth."*** The applicant's arguments are not germane to the claimed invention. Additionally, the applicant's arguments do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the

claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections.

3. Applicant's arguments have been carefully considered, however, not deemed persuasive. More particularly, applicant puts forth on pages 3-8 arguments, which are not germane to the claimed invention. Applicant has put forth arguments, which are not commensurate with the scope of the claims 1-3. Applicant has failed to show how claims 1-3 define over prior art of record, and has merely alleged Patentability based on the disclosure of the invention and how the physical effects on the invention. Additionally, applicant provided the physics principles (See Advanced level Physics, 3rd edition, M. Nelkon), in which applicant had relied to explain how the physical effects in the instant application; however, these physics principles do not read on the claims 1-3. Claims in a pending application are given their broadest reasonable interpretation. See *In re Peterson*, 181 USPQ 641 (CCPA 1974).

Conclusion

This action is a **final rejection** and is intended to close the prosecution of this application. Applicant's reply under 37 CFR 1.113 to this action is limited either to an appeal to the Board of Patent Appeals and Interferences or to an amendment complying with the requirements set forth below.

If applicant should desire to appeal any rejection made by the examiner, a Notice of Appeal must be filed within the period for reply identifying the rejected claim or claims

appealed. The Notice of Appeal must be accompanied by the required appeal fee of \$320 (See attached Fees FY 2003 Schedule).

If applicant should desire to file an amendment, entry of a proposed amendment after final rejection cannot be made as a matter of right unless it merely cancels claims or complies with a formal requirement made earlier. Amendments touching the merits of the application which otherwise might not be proper may be admitted upon a showing a good and sufficient reasons why they are necessary and why they were not presented earlier.

A reply under 37 CFR 1.113 to a final rejection must include the appeal from, or cancellation of, each rejected claim. The filing of an amendment after final rejection, whether or not it is entered, does not stop the running of the statutory period for reply to the final rejection unless the examiner holds the claims to be in condition for allowance. Accordingly, if a Notice of Appeal has not been filed properly within the period for reply, or any extension of this period obtained under either 37 CFR 1.136(a) or (b), the application will become abandoned.

Note to Applicant:

This Office Action does not have a provision for faxing Office Action overseas. Accordingly, all actions involved in the case will be sent via US mail services.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai-Ba Trieu whose telephone number is (703) 308-


6450. The examiner can normally be reached on Monday - Friday from 7:00 a.m. to 5:30 p.m., first and second Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion can be reached on (703) 308-2623. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7763 for regular communications and (703) 308-7763 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0861.

TTB
January 14, 2003


Thai-Ba Trieu
Patent Examiner
Art Unit 3748


THOMAS DENION
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